

*Amendments to the Claims*

The listing of claims below will replace all prior versions and listings of claims in the present application.

*Claim Listing*

1           1. (Previously Presented) A computer-implemented method of rendering data for  
2     producing a full parallax autostereoscopic display of a digital scene, comprising the steps  
3     of:

4           defining an image plane that passes through at least a portion of said scene;  
5           dividing the image plane into a plurality of contiguous image elements;  
6           simulating two camera frustra on opposing sides of said image plane, each camera  
7                 frustrum having an associated eyepoint;  
8           defining a near clipping plane of said frustra on said image plane;  
9           for each image element, determining a distance between said eyepoint and said  
10                 near clipping plane that would avoid near clipping of said scene, thereby  
11                 determining a set of near clipping plane distances;  
12           positioning said camera frustra along a z axis in accordance with one or more of  
13                 said near clipping plane distances;  
14           generating, for each of said elements, image data for each of said cameras; and  
15           combining said image data, thereby rendering said scene.

1           2. (Original) The method of Claim 1, wherein the method is performed to  
2     produce holograms, and wherein said generating step provides holographic image data.

1           3. (Original) The method of Claim 1, wherein said positioning step provides a  
2     single near clipping plane distance for all of said elements.

1           4. (Original) The method of Claim 1, wherein said positioning step provides near  
2     clipping plane distances within a predetermined range.

1           5. (Original) The method of Claim 1, further comprising the step of identifying

2 degenerate elements for which said determining step will not result in avoiding clipping.

1 6. (Original) The method of Claim 5, wherein the method is performed to  
2 produce a hologram, and further comprising the step of rendering image data for said  
3 degenerate elements by special compositing of images from said camera frustra.

1 7. (Original) The method of Claim 5, further comprising the step of rendering  
2 image data for said degenerate elements by repositioning said camera frustra in a  
3 direction parallel to said image plane.

1 8. (Original) The method of Claim 1, wherein said scene is comprised of  
2 polygons, and said determining step compares z vertices of said polygons with a z  
3 distance of said clipping plane.

1 9. (Original) The method of Claim 1, further comprising the step of evaluating  
2 said image data for depth resolution and compensating said image data based on said  
3 evaluating step.

1 10. (Previously Presented) A full parallax autostereoscopic print of a digital  
2 scene, whose image data is rendered according to the following steps:  
3 defining an image plane that passes through at least a portion of said scene;  
4 dividing the image plane into a plurality of contiguous image elements;  
5 simulating two camera frustra on opposing sides of said image plane, each camera  
6 frustrum having an associated eyepoint;  
7 defining a near clipping plane of said frustra on said image plane;  
8 for each of said contiguous image elements, determining a distance between said  
9 eyepoint and said near clipping plane that would avoid near clipping of  
10 said scene, thereby determining a set of near clipping plane distances;  
11 positioning said camera frustra along a z axis in accordance with one or more of  
12 said near clipping plane distances;  
13 generating, for each of said contiguous image elements, image data for each of  
14 said cameras; and combining said image data, thereby rendering said

15 scene.

1 11. (Previously Presented) A computer-readable medium whose contents cause a  
2 computer system to render image data for a full parallax autostereoscopic display, by  
3 performing the steps of:  
4 defining an image plane that passes through at least a portion of said scene;  
5 dividing the image plane into a plurality of contiguous image elements;  
6 simulating two camera frustra on opposing sides of said image plane, each camera  
7 frustrum having an associated eyepoint;  
8 defining a near clipping plane of said frustra on said image plane;  
9 for each of said contiguous image elements, determining a distance between said  
10 eyepoint and said near clipping plane that would avoid near clipping of  
11 said scene, thereby determining a set of near clipping plane distances;  
12 positioning said camera frustra along a z axis in accordance with one or more of  
13 said near clipping plane distances;  
14 generating, for each of said contiguous image elements, image data for each of  
15 said cameras; and  
16 combining said image data, thereby rendering said scene.

12-17. (Cancelled)